Appl. No.:   09/903.300
Filed: 07/11/2001
Page 11

REMARKS/ARGUMENTS

Applicant would like to thank the Examiner for the thorough review of the present application. Based upon the amendments and the following remarks, Applicants respectfully request reconsideration of the present application and allowance of the pending claims.

35 U.S.C. § 103 (a) Rejections

Claims 1, 2, and 4-6 stand rejected under U.S.C. 103 (a) as being unpatentable over Chu et al. in view of Lewis. In light of the following remarks, the rejection is respectfully traversed.

Neither Lewis nor Chu et al. suggest the use of a multi-tasking operating system as that term is understood by those of ordinary skill in the art. Further, neither reference discloses nor suggests the following features of claim 1:

> a histogram processing module executed by the multi-tasking operating system as a low priority task that analyzes the image data in the memory component and calculates a target contrast; and
> an imager control module executed by the multi-tasking operating system as a high priority task that sets a gain and exposure for the imager based on the target contrast calculated by the histogram processing module.

While the Examiner indicates that Lewis discloses a plurality of software modules, there is no indication, much less a suggestion, of multi-tasking nor the recited division of functions. Of equal importance is the lack of any suggestion regarding priority to be placed on the separate tasks.

Appl. No.:   09/903,300
Filed: 07/11/2001
Page 12

Claims 3, 7-13 and 18-47 stand rejected under 35 U.S.C. 103 (a) as being unpatentable over the Chu et al. in view of Lewis and Danielson et al. In light of the following remarks, the rejection is respectfully traversed.

The Examiner relies on the '614 Danielson patent to show a handheld device that is provided with a multi-tasking operating system. However, Danielson lacks teaching regarding the split in functions as taught by the present invention and described in the independent claims. Further, there is noting in Danielson that would suggest the priority to place on such a division. As noted above, Chye et al and Lewis also share this lack of teaching, such that there is no suggestion in any of the combined references for:

a histogram processing module executed by the multi-tasking operating system as a low priority task that analyzes the image data in the memory component and calculates a target contrast; and
an imager control module executed by the multi-tasking operating system as a high priority task that sets a gain and exposure for the imager based on the target contrast calculated by the histogram processing module.

Nor is there any suggestion in the combined references for:

a processor operating pursuant to a multi-tasking operating system that executes a high priority software-exclusive module for real time control of the imager and a lower priority software-exclusive module that examines the image data and provides feedback to the high priority software-exclusive module facilitating setting of a gain and exposure of the imager.

The independent claims 19 and 29 contain similar limitations.

Independent claim 37 sets forth a multitasking system operating on a bar-code reader that "implements a plurality of imaging modules and places a higher priority on operations that adjust setting of the imager." This limitation is neither taught nor suggested by the combination of references set forth by the Examiner. Independent claim 49 has similar limitations.

Appl. No.:   09/903,300
Filed: 07/11/2001
Page 13

      Claims 14-17 stand rejected under 35 U.S.C. 103 (a) as being unpatentable over the Chu et al. in view of Lewis and Feng. Feng does not cure the defects noted in Chu et al. and Lewis. Accordingly, withdrawal of this rejection is respectfully requested.

Conclusion

      In view of the proposed amended claims and the remarks submitted above, it is respectfully submitted that the present claims are in condition for immediate allowance. It is therefore respectfully requested that a Notice of Allowance be issued. The Examiner is encouraged to contact Applicant's undersigned attorney to resolve any remaining issues in order to expedite examination of the present invention.

      It is not believed that extensions of time or fees for net addition of claims are required, beyond those that may otherwise be provided for in documents accompanying this paper. However, in the event that additional extensions of time are necessary to allow consideration of this paper, such extensions are hereby petitioned under 37 CFR § 1.136(a), and any fee required therefore (including fees for net addition of claims) is hereby authorized to be charged to Deposit Account No. 503577.
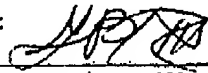
Respectfully submitted,

                                         HANDHELD PRODUCTS, INC.

Date: August 15, 2005   By: _[signature]_

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